Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

HW#13: Line Segments

Geometry

Due Date: Wednesday, September 17th, 2014

**Failure to show work and write in complete sentences will result in a LaSalle.**

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| 1. Measure the following line segments to the nearest tenth of a centimeter and the nearest of an inch.    AB: \_\_\_\_\_\_\_\_ centimeters \_\_\_\_\_\_\_\_\_ inches  CD: \_\_\_\_\_\_\_\_ centimeters \_\_\_\_\_\_\_\_\_ inches | | 2. On a particular line segment, points *A*, *B*, and *C* are collinear, and *B* is between *A* and *C*. If *AB* = 15 and *BC* = 9, what is the measure of *BC*? | | |
| 3. Find *KM.* | | 4. Find *ST.* | | |
| 5. Find *BC.* | | 6. If *AC* = 35, what is the value of MC?  x + 5 2x  A M C | | |
| 7. On the map, AB represents a trail that you are hiking. You start from the beginning of the trail and hike for 90 minutes at a rate of 1.4 miles per hour. How much farther do you need to hike to reach the end of the trail? | | 8. **On a separate sheet of graph paper**, plot the given points in a coordinate plane. Then state whether the line segments are congruent.   1. Plot the points *A*(2, 2), *B*(4, 2), *C*(–1, –1), *D*(–1, 1)   Are AB and CD congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Plot the points *M*(1, –3), *N*(4, –3), *O*(3, 4), *P*(4, 4)   Are MN and OP congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Plot the points *E*(–3, 4), *F*(–1, 4), *G*(2, 4), *H*(–1, 1)   Are EG and FH congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| 9) Find *LM*. | 10) Find *VW*. | | | 11) Find *YZ*. |
| 12) Determine the slope of the line: \_\_\_    b) What is the y-intercept? \_\_\_\_ | | | 13) Determine the slope of the line: \_\_\_\_    b) What is the y-intercept? \_\_\_\_\_ | |
| 14a) Which line has the smallest positive slope?  b) Which line has the biggest positive slope?  c) What is the slope of line B?  d) What is the slope of the line C?  A  B  C  D  E | | | 15) Sketch the graph of a line that crosses through the point (-5, 0) and has a slope of 2. | |
| 16) Shirley builds a doll house on her own for an hour. At that time, her mother starts helping her build, and they work together at a rate of twice the speed Shirley was working alone.  *Plot the scenario on the graph below:*  Completion  Of Doll House    Time | | | 17) **Error Analysis.** Detteller determined that the slope of the line below is . Is she correct? *Why* or *why not* – explain & correct. | |
| 18) **Explain.** Carlos lets a tennis ball roll down a ramp that has a height of 8 feet and a length of 12 feet. Taniya lets a tennis ball of the same dimensions roll down another ramp that has a height of 3 feet and a length of 10 feet. Whose ball will get to the end of the ramp first? *Why? Be specific.* | | | | |